

CLAIMS

1. An alkali-free glass which comprises:
SiO₂ in an amount of from 40 to 70% by weight;
Al₂O₃ in an amount of from 6 to 25% by weight;
B₂O₃ in an amount of from 5 to 20% by weight;
MgO in an amount of from 0 to 10% by weight;
CaO in an amount of from 0 to 15% by weight;
BaO in an amount of from 0 to 30% by weight;
SrO in an amount of from 0 to 10% by weight;
ZnO in an amount of from 0 to 10% by weight,
each based on the total amount of said glass, and
helium and/or neon in an amount of from 0.0001 to 2
μl/g (0°C, 1 atm.).
2. The alkali-free glass according to claim 1,
which further comprises a fining component.
3. The alkali-free glass according to claim 2,
wherein the fining component is at least one selected from
the group consisting of SO₃, Sb₂O₃, SnO₂ and Cl₂.
4. The alkali-free glass according to claim 3,
wherein SO₃ is contained in an amount of from 0.0001 to
0.03 % by weight based on the total amount of said glass.

5. The alkali-free glass according to claim 3, wherein Sb_2O_3 is contained in an amount of from 0.05 to 3 % by weight based on the total amount of said glass.

6. The alkali-free glass according to claim 3, wherein SnO_2 is contained in an amount of from 0.05 to 1 % by weight based on the total amount of said glass.

7. The alkali-free glass according to claim 3, wherein Cl_2 is contained in an amount of from 0.005 to 1 % by weight based on the total amount of said glass.

8. A transparent glass substrate for a liquid crystal display which is obtainable by the alkali-free glass according to any one of claims 1 to 7.